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**ІННОВАЦІЙНІ ТЕХНОЛОГІЇ В СИСТЕМІ
ПІДВИЩЕННЯ КВАЛІФІКАЦІЇ ФАХІВЦІВ
ФІЗИЧНОГО ВИХОВАННЯ І СПОРТУ**

ТЕЗИ ДОПОВІДЕЙ
II МІЖНАРОДНОЇ НАУКОВО-МЕТОДИЧНОЇ КОНФЕРЕНЦІЇ
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CORRELATE WITH SOMATIC THREE PARAMETERS OF SPORTSMANSHIP SUMY UNIVERSITY ARCHERY TEAM

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Sport result depends a lot on morphologic features of the sportsman, that is one of the selective factors determining the sportsman's perspective.

Purpose of research is to determine body build peculiarities of the students involved in archery.

Object and methods of research. Object of the research was 30 students Sumy State University. The first group consisted of 10 students (18-21 years old) training in archery sports clubs. It includes First-Class sportsmen, Candidates for Master of Sport, Masters of Sport, World-class athletes. Prize-winners and champions of Ukraine, the world champion and European Cup winners, the champions of tournaments and regional competitions.

The second group consisted of 20 students (18-21 years old) of basic group physical culture.

For these research purposes such methods were applied - somatometric method, statistic and mathematic research methods.

The examined somatic indices correlate with the level of sportsmanship and the training experience (Table 1). Comparing 35 somatic indices five of them correlate with assessmet of the rank sportsmanship of tested students, eight - at average, eighteen - at low, and four - at low level. Training experience correlate with somatic three parameters: with three - on average, with fifteen - at low level and fourteen - at low levels. Table 1.

The correlations of individual physical parameters with training experience and the level of sportsmanship team of the University of archery.

| Somatic Characteristics (cm) | Training experience | Sport level |
|------------------------------|---------------------|-------------|
| Weight, kg | -0,092 | -0,092 |
| Height, cm | -0,0762 | 0,3333 |
| Upper segment of body, cm | 0,4525 | 0,5016 |

| | | |
|--|---------|---------|
| Middle segment of body, cm | -0,0193 | 0,44083 |
| Lower segment of body, cm | -0,1867 | 0,133 |
| Length of shoulder, cm | -0,6934 | -0,323 |
| Length of forearm, cm | 0,2768 | 0,552 |
| Length of wrist, cm | -,06842 | 0,238 |
| Total length of upper extremity segments, cm | -,01155 | 0,34 |
| Length of hip, cm | -0,342 | -0,4316 |
| Length of shin, cm | -0,065 | 0,3543 |
| Total length of foot, cm | -0,179 | 0,2852 |
| Vital capacity | 0,115 | 0,5264 |
| Breadth of shoulder, cm | -,0426 | 0,471 |
| Transverse diameter of chest, cm | -0,27 | 0,041 |
| Antero-posterior diameter of chest, cm | -0,128 | 0,3126 |
| Transverse diameter of the shoulder distal epiphysis, cm | 0,2935 | 0,74976 |
| Transverse diameter of forearm distal epiphysis, cm | 0,4441 | 0,576 |
| Breadth of wrist, cm | 0,2217 | 0,644 |
| Transverse diameter of the hip distal Epiphysis, cm | 0,3046 | 0,74732 |
| Transverse diameter of the shin distal epiphysis, cm | -0,2276 | 0,26341 |
| Maximum breadth of foot, cm | -0,1744 | 0,25973 |
| Inspiratory reserve volume, cm | 0,4549 | 0,4549 |
| Expiratory reserve volume, cm | 0,427 | 0,4273 |
| Excursion | 0,0086 | 0,4458 |
| Circumference of shoulder in quiet position, cm | 0,5567 | 0,556 |
| Circumference of shoulder in tension position, cm | 0,7068 | 0,70680 |
| Circumference of hip, cm | 0,3746 | 0,37467 |
| Circumference of shin in wide part, cm | 0,285 | 0,285 |
| Circumference of shin in narrow part, cm | 0,051 | 0,051 |
| Circumference of foot, cm | 0,380 | 0,380 |
| Circumference of forearm in wide part, cm | 0,777 | 0,777 |
| Circumference of forearm in narrow part, | 0,733 | 0,733 |
| Right hand dynamometry | 0,279 | 0,279 |
| Leftt hand dynamometry | 0,561 | 0,561 |

Conclusions. Selected indices of body build of sportsmen correlate with the level of sportsmanship and the training experience.